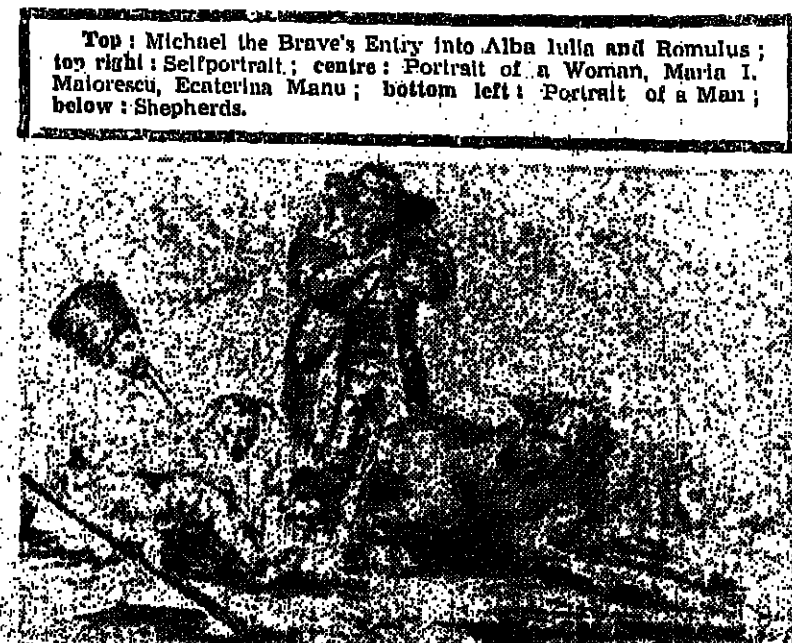


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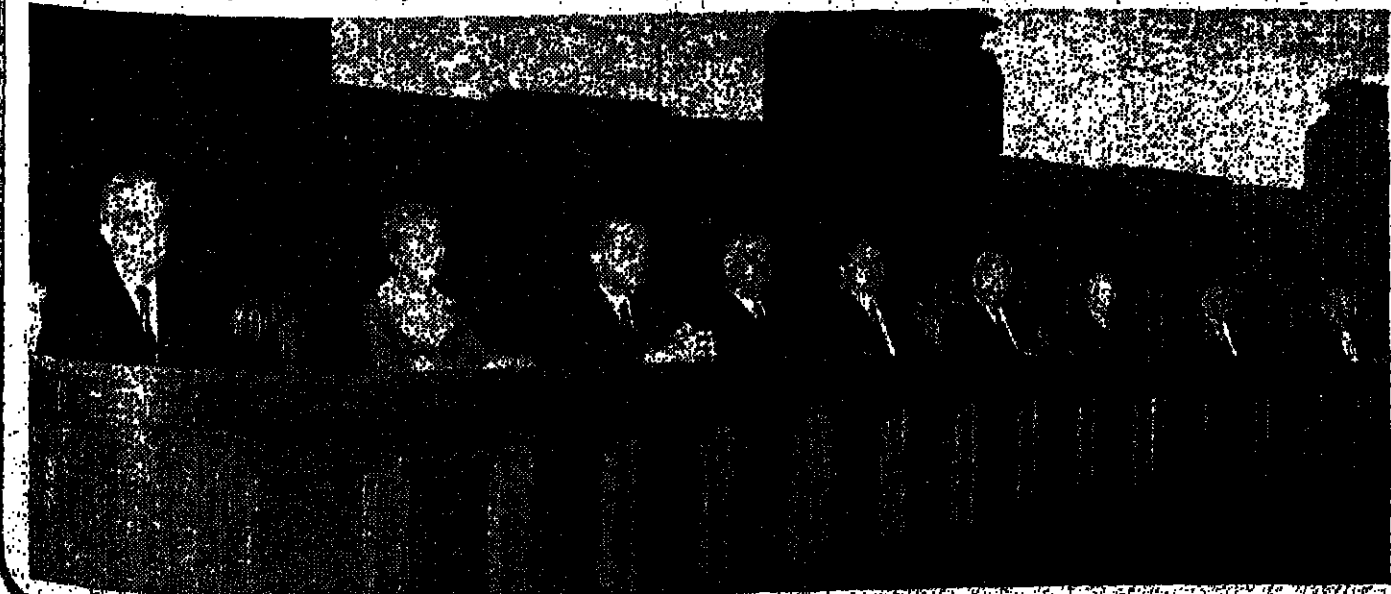
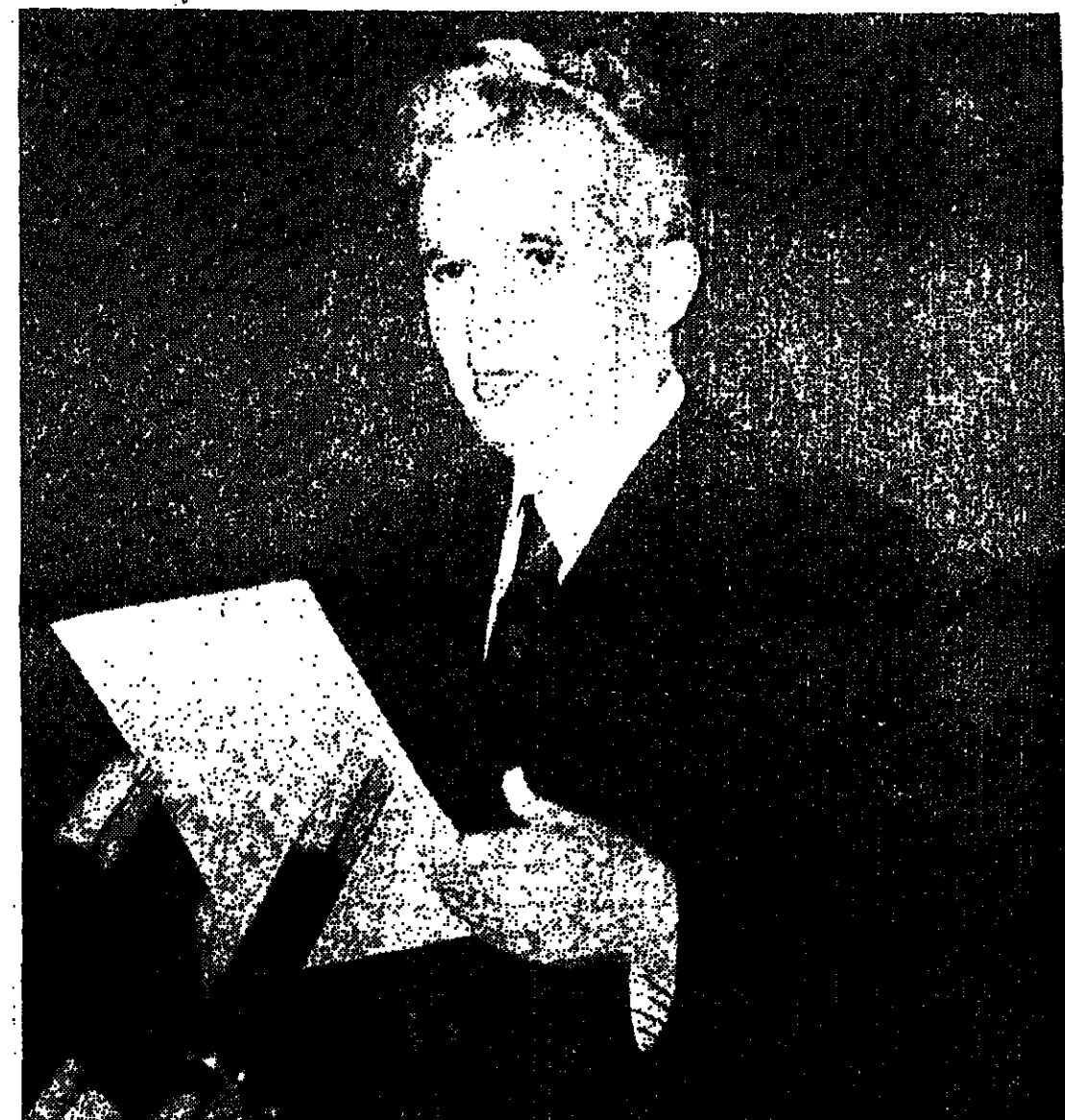
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After the general debate and the discussion of each bill article by article, the Grand National Assembly unanimously passed them by voting.

According to the agenda, next, the Grand National Assembly unanimously passed the bill on the legal status of the socialist union according to the principles of the workers' self-management and economic independence of the socialist countries. The bill on placing the workers' carrying terms with legal force issued by the Basic Council.

The agenda today records, Nikolaos Gialas, Chairman of the Council of Ministers, announced the overall results of the ninth legislative term closed.



PRAISING WHEAT

Among the extremely interesting summer actions of the Village and Folk Art Museum in the Capital — the exhibition "Praising Wheat" has special significance. An old occupation of the Romanian territory, wheat growing is connected, in the people's consciousness to a series of customs, passed on from one generation to another, proving over the centuries, the continuity of the population practising it, as well as the people's steadfastness in their love for the land, the land as nature and land as ancestral hearth, full of treasures and morals.

The exhibition proposes to present the public, by means of archaeological material, photos, sketches, texts and reconstructions, incorporating a lot of hard work and passion on the part of the researchers — the main aspects concerning the farmer — field labour — rich crops relation. The whole cycle of agricultural works with all tools, the practices resulting from a rich experience, with the observations accompanying it is thus presented.

A material and spiritual dowry the visitors surely appreciate. (Photo right).



NEW DRUGS

The Bucharest based National Office for Inventions and Marks has recently granted two invention patents to Oradea physicians Artilina and Ludo Eithee, known by the broad public as authors of an original treatment meant to fight hepatobiliary affections. This time, their researches ended with the creation of two preparations with a different therapeutic profile. It is an ointment used in the therapy of skin diseases and an antiallergic drug.

The dermatological product is recommended by its anti-inflammatory, healing properties and is useful for treating skin and subcutaneous lesions of various etiologies: first and second degree burns, scabies and dry eczemas, various sores, contagious impetigo, furunculosis, herpes, post-operative wounds, pruritus of various causes, acne, freckles, eczemas, etc. The patient holder, the Antihistamine Enterprise in fast expressed the will to manufacture it at industrial scale.

Elicohap a vegetal extract used in the therapy of hepatobiliary affections, now under the supervision of doctors Artilina and Ludo Eithee will be produced this autumn at Plantavore Laboratory in Piatra Neamt.



LIME-TREE CELEBRATION

Every year, at the end of June, when lime-trees are in full blossom, Iasi hosts a cultural event under the catchphrase "The Lime-Tree Celebration". This year's display gathered a large number of poets, prose writers, teaching staff, pupils and students in the Copou cultural park, under the lime-tree so much loved by great poet Mihail Eminescu. Within this framework, pointed out were the personality and work of the Romanian poet by a recital of poetry performed by members of Iasi literary workshops, as well as by two literary-musical shows involving many professional and amateur artists.

CESAROM

In the Romanian construction materials industry, the CESAROM Enterprise holds a distinct place. The Bucharest-based unit ranks first in the country as regards the level of its products and the quality of its services. The CESAROM Enterprise is a well-known and highly respected name in the construction materials industry in Romania and abroad.

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RIVERS WHOSE DESTINY IS CHANGING

From the Danube's bed to Dorobanți commune, people have dug an 8 km long canal. The Danube's waters flow gravitationally to the dam on which the Căldăruș-Oltului railway was raised. And from there, during droughty periods, five floating stations transfer the river's waters to the Iezeru-Moștelea lake. Their total flow is for the time being, 90 cu.m. per second. About as much as three rivers of Ialomița's size flowing together. I said for the time being because in the long range other floating stations are to pump even larger volumes of water into the reservoir on the other side of the dam, covering an area of 2,800 ha, the widest inland lake in Romania. The clearest too, as no source of pollution troubles its crystal clarity.

Not far from the dam lies an island, a true kingdom of the birds, where one can encounter various species of terns, wild ducks, birds, pelicans, white and black swans, as well as other rare species characteristic of the fauna of the Danube Delta.

Thanks to the substantial funds invested along the years, the whole Moștelea valley, which is over 70 km long, has become a "filter" which attenuates spring floods.

Geography is changing under our very eyes. Together with engineers Teodor Năulescu, director of the Căldăruș County Water Management Office, and Nicolae Percec, Inspector with the Land Reclamation Construction Inspectorate, I made a pleasant and instructive voyage over these stretches of water. The National Programme of Farming Inland Waters envisages the building of five major reservoirs along the Moștelea Valley through the creation of the Dorobanți, Frâncet, Gurbănești, Fundulea and Măriașu dams. They will eventually make possible the irrigation of 23,914 ha in Căldăruș and Ialomița counties and in the Ilfov agricultural district.

It should also be added that the Ialomița was connected to the Moștelea by a 19 km canal stretching between the Măriașu and Drăniș storage basins. Another canal linking the rivers Siret and Ialomița is now under construction. In this way the Siret will join the Danube not just through the river Putna, as it was destined by nature, but



also through the Moștelea. A large-scale engineering art work which changes the geography of these places.

In the years with medium or abundant rainfall, the waters of the Siret and Ialomița, flowing gravitationally through canals, will no longer damage the crops or threaten riparian localities; they will be used instead for crop irrigation through successive reservoirs built along them.

In times of drought, the Danube's water will be pumped through the same reservoirs upstream to quench the earth's thirst. Three of the five planned reservoirs already function at capacity. The dams of Frâncet — built on a neat foundation (among the few dams of this kind in Europe and in the world) and of Gurbănești — founded on mud — have completed some of the most important works envisaged in the programme.

Those who are responsible for the management of the waters on this territory have the duty to keep them at the optimum level.

"How is this operation possible?" I asked engineer Mircea Năulescu, head of the Moștelea water supply system.

"In droughty years we pump water from the Iezeru reservoir into the Frâncet one by means of four floating stations in order to secure the necessary level. From there, with the help of other floating stations, we transfer the water into the Gurbănești reservoir. And again from there, in the near future,

we shall transfer it to the Fundulea and Măriașu lakes, then into the main canal that provides a link with the Ialomița."

Therefore in the years with scarce rainfall the water flows upstream towards its source. But, this spring we have had plenty of rainfall. The reservoirs in the Moștelea valley are full to the brim. There is no need, and there will be no need for quite some time, to start the engines of the floating stations. However, those pumping the water towards the canals of the irrigation systems are in operation at Frâncet, Sultana, Gurbănești, Siliștea, Pătina Doamnei, Cojocovana and Selnou.

MICROHYDROPOWER PLANTS AND IRRIGATION

We drove upstream, along the Moștelea Valley, between hills no higher than 10-15 m. towards the heart of the Măriașu Plain. Engineer Corneliu Ivan, deputy head of the 402. the brigade of the Mănești enterprise for special hydro-technical works, told me that the working schedule for the Fundulea dam was being successfully observed. They had reached the final height of the dam — 4.4 m. Now they were filling its body. It is upstream and downstream, the flood spillway (including the lower for the operation of the gates and spillways) will regulate the level of water in the storage basin. The outlet tunnel had been completed throughout its length of 100 m. An original technology had put the question: how to lay some three months. An intense activity was also going on at the dam's base.

A few kilometres to the north, at Drăniș, another dam has been raised in the Ialomița's way, to create a reservoir covering nearly 1,000 ha. In the body of the dam, one has incorporated the turbines of a microhydropower plant, the first of this kind in this endless plain, which has an installed capacity of 2.2 kw.

People master the waters, changing their sources and destinations, with material, working and intelligence efforts. Within a few years all these investments will prove their efficiency. The water will be used for irrigation, but also for power and recreational purposes. The water will be used for irrigation, but also for power and recreational purposes. The water will be used for irrigation, but also for power and recreational purposes.

WATERS FLOWING UPSTREAM

Drăniș and Dorobanți lie at a distance of 22 km from each other. The village of Dorobanți is a small settlement. The level difference between the two dams is about

THE LAKE OF MIHAILĂȘTI

21 km away from Bucharest, constructors create a storage lake at Mihailăști, with a 20-km long contour and a capacity of some 100 million cu.m. of water. This is one of objectives of the future Danubio-Bucarest Canal, measuring 72 km in length and 60 m in width, by which Romania's capital will become a Danube port over the next two years. This port has a narrow infrastructure, with five berths and a railroad nearing completion which is to connect the port proper with the belt line of the capital.

THERAPEUTIC SOURCES

The mud of Mangalia's lake has been known by specialists for a long time and the locals have been using it empirically, without any balneal knowledge. Tapping up and deepening studies begun in the interwar period, specialists established accurately the properties of that mud and of the sulphurous mesothermal waters coming from springs supplying the basin of the lake. The analyses made so far led to the conclusion that the five-million-cu.m. large mud of the lake has, among others, macromolecular substances rich in carbon, humic acids, fat with ether, vegetable jelly, carbohydrate. At the same time there are calcium, magne-

sium carbonates and silicates reaching high values, as well as silicon oxide, iron, aluminium and aluminium silicates. Therefore, the analysis of the chemical composition of Mangalia mud proves that the latter has a rich content of mineral substances, conferring on it properties which are much than others to be found in Romania and abroad. Mention should also be made that the mud appears under the form of fine grains which make it more consistent and allow it to be much better spread. From the viewpoint of its therapeutic properties, this mud can be compared with the famous one of Techirghiol lake. (Photo above).

INVENTION

The air conditioning installation created by the Romanian inventor Ion Iapășcoiu is based on the separation of compressed air molecules in Ranque type device and its distribution to consumers in two flows, of hot and cold air, that can be distributed according to the needs. The installation has an air compressor, humidity control devices, refrigeration rooms, filters and original warmth switches "with gradual fluid losses." Its advantages are numerous, among which the integration in the general ambience of the building and the stimulation of room deterioration upon the malfunction of heating elements are first to be mentioned.



COMPUTERIZED COLOUR THERMOGRAPHY

The first Romanian computerized colour thermograph came out of the interdisciplinary research between the "O. I. Parhon" Endocrinology Institute and the Computer Factory in Bucharest.

The apparatus, based on a Felix PC computer has an applicative software of the expert type, offering the possibility of a differential diagnosis between a benign affection and breast cancer and between various clinical forms of the benign affections of this organ.

In less than five minutes, this system made by dr. Bogdan Ciupăneanu and cybernetician Corneliu Colțuș, can establish a diagnosis, avoiding complicated investigations with imported installations, like mammography and ultrasonography.

The written application of QWASIO and TURBO-PASCAL languages inspired on breast pathology can be generalized and taken over by specialists in various fields. This equipment functions within the "O. I. Parhon" Endocrinology Institute, in the gynaecologic and breast endocrinology room. (Photo above).



AN INDUSTRY FOR MILLIONS OF BUYERS

The Romanian light industry is indisputably a branch producing for very many buyers. Virtually every town in Romania hosts a productive unit of this field. Currently, the manufacturing list of this branch includes thousands of products — knitwear, garments, footwear, fabrics, etc., created in millions of types and sizes. The Romanian light industry has millions of buyers on the world market, too. Currently, the products of this branch are purchased by customers in over 100 countries.

CREATIVENESS, QUALITY, COMPETITIVENESS

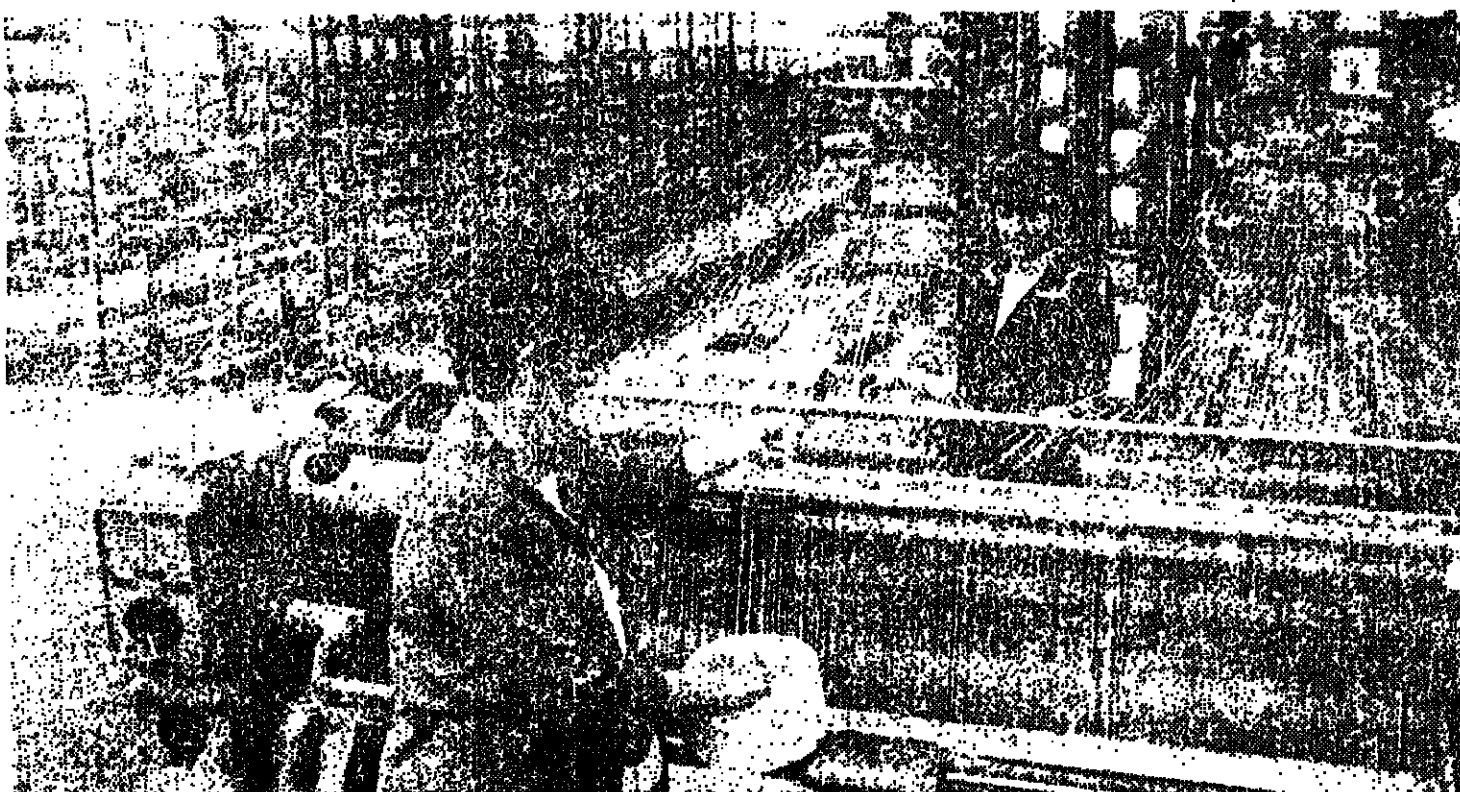
Working at Balotesti, a commune lying about 25 km north of Bucharest, is an important light industry enterprise (unit) to account for and keep the balance. Besides a modern weaving mill and a finishing section, the enterprise of Balotesti also comprises a large spinning mill, the second biggest in this country after that of Falticeni.

The enterprise (in 1983) he climbed all ranks of his profession: engineer on probation, shift head, technologist, head of the finishing section, head of the research and design section. "Since 1972, the enterprise has gone through several stages of expansion and modernization," engineer Iovan went on. "We started with the spinning mill and the finishing section; then

clothing fabrics (in thousands of prints and colours) to tents and awnings".

"Enhancing the products' quality and enriching their range are everyday concerns of the enterprise. What are their fruits?"

"We have our own research and design workshop staffed by young, enthusiastic people who yearly enrich the manufacturing list with about 30 types of high-quality products meeting any exigency of the foreign market. Proving this is the continuous growth of exports. Over 1980—1988 alone the volume of exports has grown about five times. Our first commercial partner (since 1978) was an Australian firm. There followed more and more clients from numerous countries such as the USSR, Canada, the USA, Sweden, Libya, West Germany, Italy, Hungary, Zambia. Our products are highly appreciated and in ever greater demand," Florin Iovan concluded, stressing that nearly one-third of the enterprise's current production is export-bound.



have been working at Balotesti for 15 years. That is since the setting up of the unit, engineer Florin Iovan recalled rather nostalgically. A graduate of the Polytechnic Institute in Iasi, the young engineer (born in Viteaz county) is currently an inhabitant, together with his family, of Balotesti commune. Before being appointed director of

followed the weaving mill. Since 1977, the enterprise has integrated its production, the flax and hemp fibres being turned into finished goods — flax-hemp-type fabrics. As a result of this, the volume of the marketable production has grown twice in the last decade alone, while labour productivity has trebled. At the same time, the manufacturing list has been diversified too — we now turn out over 300 items — from flax and hemp yarns to technical and

A STANDARD UNIT

Besides the bearings enterprise (a front-rank unit of the industrial branch), Birlad municipally (Vaslui county) also has another standard unit: the new shirt factory, well-known both in this country and in the world market. "During its over 40-year existence, the enterprise has developed and modernized a lot. Three main stages have been covered — 1961, 1967 (the most important development period) and the present one (which began in 1980)," engineer Emil Copelan, the enterprise's manager, mentioned. "This year,

for instance, the volume of production is twice as large as in 1985. The Birlad enterprise now turns out over 500 kinds of men's shirts annually, made of 100 per cent cotton or cotton mixed with polyester, highly appreciated by Romanian and foreign buyers. As a matter of fact, millions of men in Romania and abroad wear shirts bearing the mark of the enterprise in this Moldavian town lying in the northwest of Romania. They are high-quality products, coming in attractive designs and in a diversity of colours. "How do the products of the Birlad factory rate?" I asked engineer Copelan.

"They enjoy a good place in the foreign market where they penetrated towards the end of the sixties. During the years, we have considerably increased our exports and continuously expanded the geographic area of our foreign partners. In the 1980—1988 interval alone, our exports (through the Communist foreign trade enterprise) have more than trebled. So has the number of 'importing' firms. Some 90 per cent of the Birlad enterprise's current production is exported to scores of countries on all continents. Including the USSR, the UK, Italy, England, Belgium, France, Iraq and Canada. Our products are in ever greater demand, which demonstrates their high quality and competitiveness in the world market."

Text written by T. NITESCU
Photo by G. MOGARAN



RAILWAY COMPLEX

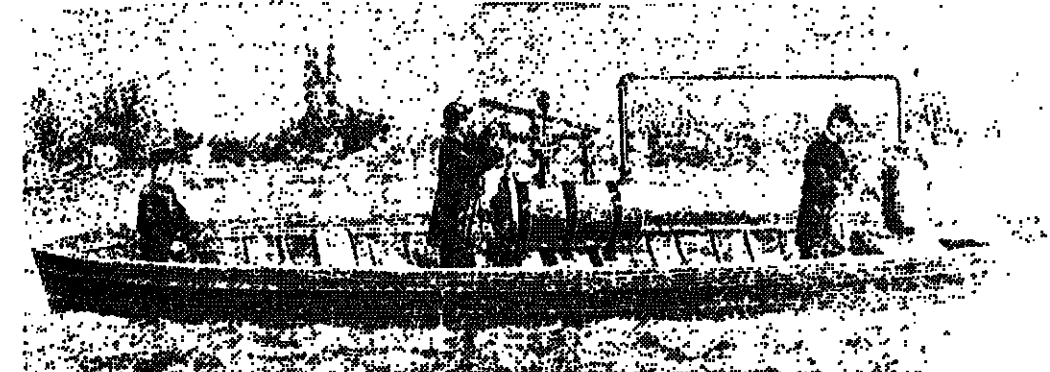
The construction of the Railway and Communications Enterprise in Calarasi finished the execution works of the new and modern railway complex Calarasi-Sud. The municipally-owned railway gate is now hardly recognisable. Where a modest station was located, are rising now the imposing, modern buildings of the complex surrounded by flowers and alleys. The most important construction in the operational block with the complicated installations of electronic centralized control, of the whole traffic, the first floor being fully equipped by the automatic manoeuvre table, both for passenger and goods trains. In its turn, the passenger station is furnished with covered platforms, while access to the rails is made through an underground tunnel. The new railway station has big waiting rooms, a "mother and child" room, hand luggage areas, a drug store, newsstand, etc. To all these is added the fact that the new railway time table includes direct Calarasi — Bucharest rapid trains on electric lines.

Alexandru Ciurea was born in Sereia commune in Fagaras land (a region in the centre of Romania) in 1894. After graduating from high school, young Alexandru attended law courses in Vienna, where he functioned within Romania's Junat Society (Young Romanians). He then returned to Bucharest where he was devoted to journalism, writing for the Unirea democratic (Democratic Union) and Romania (The Romanian) newspapers.

self in Paris where he stayed until 1920, when he returned to his native land. Several successful experiments started in August 1920 (finally led, on December 18 of the same year, to a tragic accident in which Just Dabson died and Alexandru Ciurea was seriously wounded). A few months later (July 1897), the French La Nature magazine published an ample article by the Romanian inventor who had remained confident in

You will read many things — in encyclopaedias, literary treatises or dictionaries — on the history of jet propulsion. Unfortunately none of them mentions the invention of the two technicians, although it had been patented at the time, Alexandru Ciurea and Just Dabson were the first ones to use this kind of propulsion on water. In the memory of time forgetful or... is it just ungrateful?!

CORNELIA NICULESCU



In 1977 he founded, together with Emil Gull, L'Orion newspaper which later became L'Independence Roumaine (for the Romanians the year 1977 marked the winning through fighting of national independence). Young journalist Alexandru Ciurea left for the front where, in his quality of war correspondent, he sent news and reports to Romanian and foreign publications.

In 1985 he was exiled (together with his father and a group of militants) for his progressive views and his direct criticism of social inequalities. Thus Alexandru Ciurea established him-



the future of jet propulsion on water, on land and especially in air navigation.

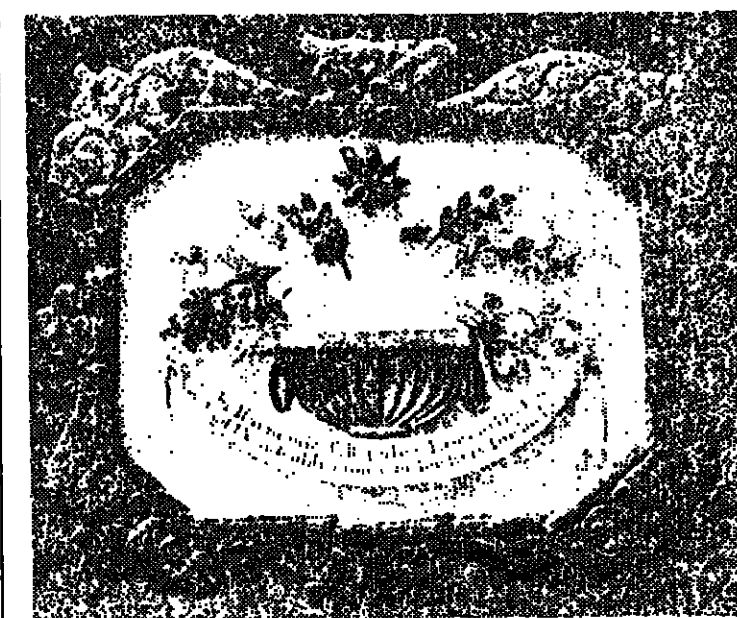
The invention of the two amateur technicians was patented in several European countries and in America. Three years after the accident on the Seine, Alexandru Ciurea married the widow of his late friend and collaborator. Then he returned to Romania together with his family and continued his activity as a journalist, speaker, farmer and politician, enjoying the respect of his readers and of the great political and cultural personalities of the time.

He died in Bucharest on the day when he was 68 years old, on January 29, 1962.

On the adjoining page: scenes from quality control activity at the Balotesti flax and hemp spinning mill, an enterprise which increased its marketable production about six times over 1972—1988. A picture from the Birlad enterprise for men's shirts, which exports its products to scores of countries. On this page: a few illustrations reproduced from La Nature magazine issued at the end of last century and devoted to the first jet propulsion attempts in the world, a fruit of the collaboration between Romanian scientist Alexandru Ciurea and French scientist Just Dabson; one of the art objects displayed at the Maria and Klaus Roemer museum of musical instruments in Timisoara; the latest photograph of the Romanian oina champions — the team of the Casa Scintila Printing House

the country and took over the direction of the important newspaper Timpul (The Time). In 1909 he was the initiator and one of the organizers of Romania's participation in the International Exhibition in France's Capital. Ten years later he founded the Journalists' Trade Unions and in 1913 he became president of the Romanian Press General Association.

Let us return to the period of his exile in Paris. It was a period when together with Just Dabson (a journalist and amateur technician) he had met and had become friends with his (Bucharest) he devoted himself to studying a new propulsion means, experimenting, for the first time in history, a boat driven by a jet engine. The jet engine was a simple but ingenious device, consisting of a cylindrical boiler (the two) which, produ-



Klaus and Maria Roemer are music aficionados. Although he graduated from the Faculty of Medicine in his native city of Timisoara, Klaus Roemer conducts an extensive activity as a musician and music critic. He has published books and papers on music, more than 1,000 notices in newspapers and magazines, has written ballet librettos, translated opera librettos and represented Romania at international music festivals in Bayreuth, Dresden, West Berlin. His wife is a well-known singer. Along the years she has toured the European countries where she has performed extremely diverse vocal works — oratorios, epigrams, lieder — in numerous shows. The artist has premiered more than 200 Romanian pieces, and has been a member of international singing juries as a prestigious representative of the Romanian school of music.

The Roemers' second love also dates from their youth. As early as the time of their kindergarten studies (they live in Timisoara) they started collecting old folk art objects: decorated mirrors from 18th century Transylvania, oil paintings of old and wood from the 18th-19th centuries, creations of well-known schools such as those at Săbău and Lazi, tapestries, furniture. Adding to them is a collection of coins of brass, another one of miniatures and watercolours, one of antiques and a valuable collection of rare books. Some of the pieces in these collections have been exhibited, published in specialized magazines, and formed the object of scientific papers.

M. CONSTANTINESCU

scientist mentioned also a variant of oina practiced in Transylvania. Further testimonies were discovered in the archives of certain high schools of Moldova, Dobrogea, Muntenia and Maramures. The first description of the game appeared in A. Lambrou's work entitled Obiectul si credinta in romani (Romanian Customs and Beliefs), published in Convorbiri Literare, in April 1975.

The game enjoyed great fame and that can be seen from the fact that Romanian sportsmen were invited to the first Olympic Games, held in Athens, 1896, with two teams performing a game of oina. Here is an event in the history of this discipline which should be taken into consideration by all means. In view of this participation the first unitary rules of the game were established. The document sanctioning the existence of our national sport was conceived by a collective of leading sport with the Nicolas Bălcescu high school in Berlin (which was famous for its oina teams) headed by professor Radu Corbu, author of a couple of works dealing with oina.

As regards the game proper,

there is now a hypothesis which according to specialists, seems to have been confirmed. It runs that American baseball stems from Romanian oina.

Representatives of the American National Broadcasting Corporation visited Romania and unanimously agreed on the basic resemblances between baseball and oina. After watching a few games of oina sports commentators Joe Caragiale declared he could hardly wait to deliver the bomb back home. However, he knew he would have to engage in a fierce controversy against the American TV operators when breaking the news about evidence attesting to the practice of oina before baseball. Joe Caragiale was sure his fellow countrymen would not believe him because they were very proud of a game they consider specifically American.

Naturally, the dispute on such a priority is of secondary importance. However, incontestable is the striking resemblance between the two national sports, the elements mentioned by professor Cristian Costescu, secretary of the Romanian Oina Federation: "The square-like field, the existence of four bases, the usage of a bat and a ball of closely similar sizes, the same number of players comprised by the two teams, each of them having a turn at bat and in the field during the nine innings that constitute a normal game, the basic structure of the game rules, in which action and score of runs are almost identical".

Mention should also be made that the first baseball draft was drawn up by officer Abner Doubleday in 1839. It is presupposed that the draft synthesized variants of oina brought to America in the 17th and 18th centuries by immigrants from Moldavia and Transylvania. The baseball played in that epoch was too similar to an old form of oina played by Romanians maybe even earlier than the discovery of America.

ION MURESAN



Vulcan

A FIRM THAT TRAVELS AROUND THE WORLD

It was started up in 1904. From its very first years, Vulcan manufactured steam boilers under licence. Gradually Vulcan expanded its concerns and began producing oil well drilling and pumping equipment under its own patents, as well as drilling boists.

Nowadays Vulcan operates in two major industrial areas in Bucharest. The spectacular development of its production facilities, their updating and equipment in keeping with the world's highest standards makes Vulcan enterprise one of the largest and most representative European manufacturers of power equipment, beam pumping units; nuclear plant equipment. Vulcan has an impressive record. Here are a few data regarding its technical, scientific and productive potential.

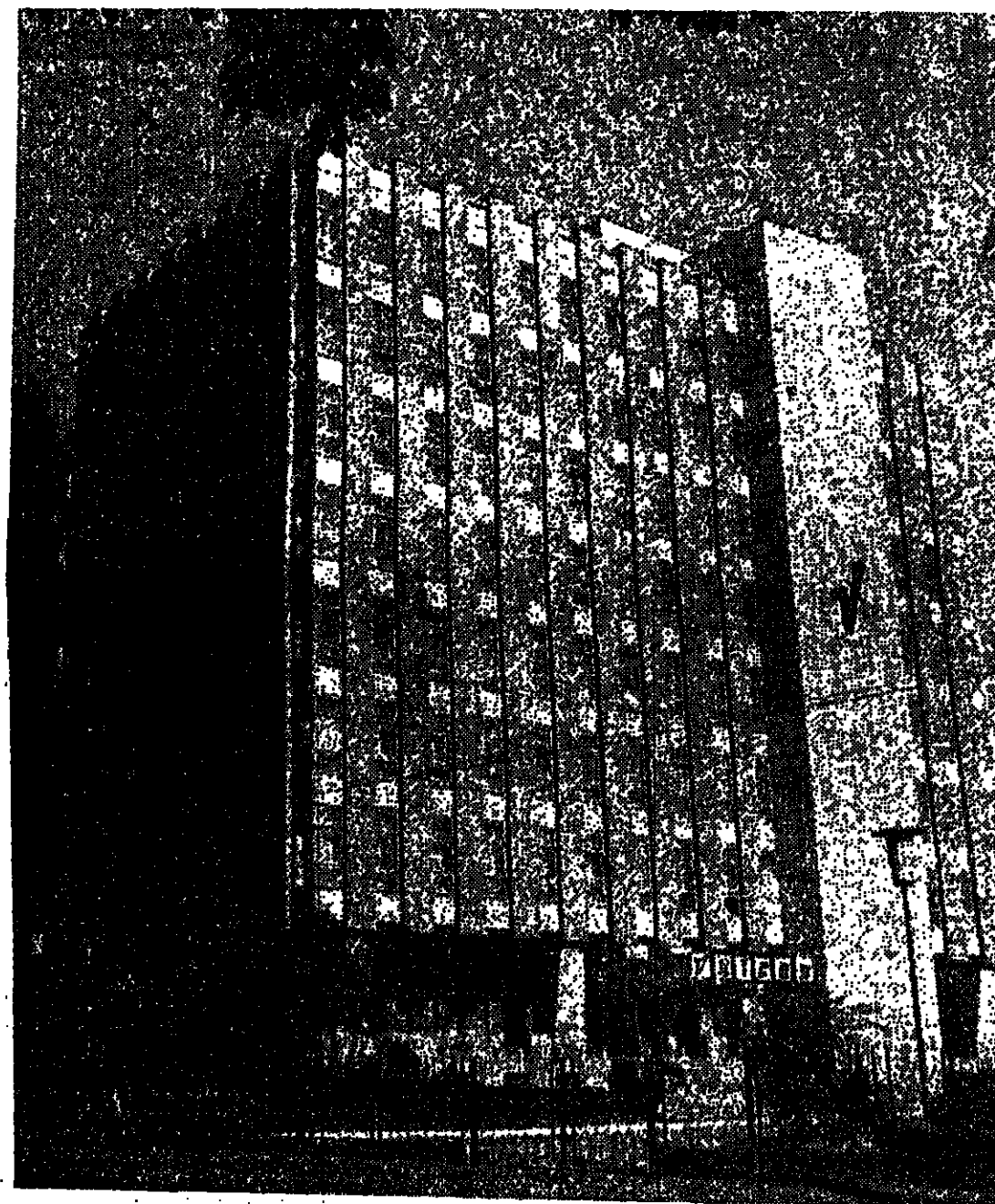


THE PLACE WHERE THE NEW IS BORN. Vulcan's close collaboration with the Institute of Scientific Research and Technological Engineering for Power Equipment and its own highly supple creative and designing possibilities enable the enterprise to have an extremely diversified output. Moreover, thanks to a strong body of highly trained specialists, engineers and technicians boasting a vast experience in energy and oil, Vulcan permanently maintains its production at the level of foreign market demands, and can assimilate in a record time all the most pretentious products, according to its own or its customers' documentation. Parallel to the improvement of the products it manufactures, an ample creative activity is also carried on at Vulcan. For instance, efforts were made to find adequate solutions for membrane walls, a modern solution used in the manufacture of steam or hot water boilers which led to the development of a special workshop producing membrane walls.

RESEARCH - DESIGN. Vulcan collaborates with other research institutes too: the Institute of Scientific Research and Technological Engineering for Power Equipment (ICITEE); the Power Research and Design Institute; the Metallurgical Research Institute; the Institute of Scientific Research and Technological Engineering for Hot Sectors etc. Vulcan's collaboration with these institutes concerning the plant's manufacturing programme includes, among other things, the production of state-of-the-art equipment, of materials adequate to the operating requirements of this equipment, or of their modern manufacturing technologies.

THE FOUNDRY, AN ESSENTIAL FACTOR. The foundry, equipped with modern furnaces, flawlessly casts all the necessary pig iron and steel parts weighing up to 2.5 tons used in the plant's production. Heavier parts are made jointly with the specialized enterprises within the Industrial Energy Equipment Contract.

AT VULCAN, THE FORGE IS NOT JUST ANOTHER DEPARTMENT. A wide range of operations are performed here in



optimum conditions: cold and temperature plastic straining through hammer and drop forging, squeezing and bending. The workshop is equipped with highly productive high-tech automatic lines and units such as big presses, various types of forging hammers and friction presses. The workshop can forge parts in small, large and very large series with a maximum weight of 2 tons, 5 m-long axes, bands

and rings with a maximum diameter of 1,250 m.

HIGH - PRECISION HEAT TREATMENTS. The treatment department executes the whole range of heat and thermochemical treatments specific to the equipment manufactured here: primary and secondary treatments, thermochemical treatments, total or local thermal and mechanical stress relieving. The metal coating of parts is executed in a modern workshop with completely automated degreasing, phosphating and coppering installations. The shop is provided with lines of induction furnaces, lines of electric or gas-fired furnaces of a vertical type, chamber furnaces, roller hearth furnaces, bath furnaces. A technological process greatly influencing the quality of the parts is the high-frequency hardening.

OVER 93 PER CENT OF THE COMPONENT PARTS OF VULCAN PRODUCTS ARE MADE IN THE ENTERPRISE. This fact contributes to the optimum execution of the wide range of products on the plant manufacturing programme, to a higher quality of products and a greater profitability of the firms to which we deliver our products, thanks to the latter's lower costs.

AT VULCAN, TECHNICAL CONTROL IS AN EXACTING QUALITY TEST. Cast parts are inspected from the point of view of their chemical composition, mechanical properties, microstructure. Nondestructive controls are also conducted. Special attention is paid to welding control.

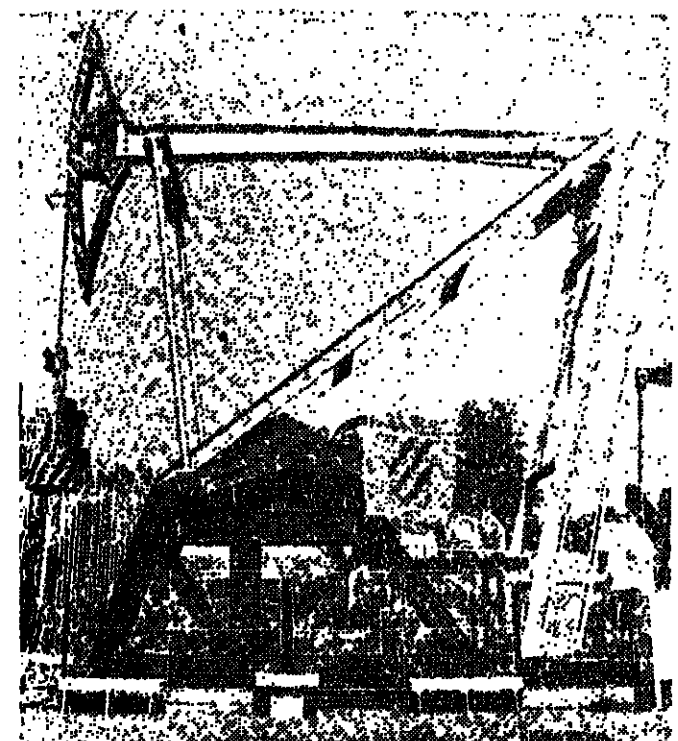
Here we should mention that Vulcan has a powerful modern welding department fitted with fully mechanized and automated equipment making it possible to apply the most advanced procedures: shielded carbon dioxide welding; shielded argon welding; mechanized and automated submerged arc-welding for sheet between six and 100 mm thick or welding on lengths varying between 1,000 and 4,000 mm. Returning to the technical quality control of the products, we should say that it is performed through the most advanced methods, such as control with penetrating liquids, magnetic powders, etc. Contributing to the complexity of the control factors and the welding is also the welding lab which, besides experimental and homologating new welding procedures, tests the welding of that type of equipment in the final stage in extreme operating conditions.

Vulcan

REMEMBER:
THE EMBLEM OF OUR PLANT - VULCAN - GUARANTEES
THE DELIVERY OF MATCHLESS, FLAWLESS PRODUCTS

AN EMBLEM OF VANGUARD PRODUCTS OF HIGHLY COMPETITIVE FEATS

A great technical, scientific and productive potential allows VULCAN plant of both displaying an extremely flexible and diversified make programme - power equipment, beam pumping units (in conventional variants and with front geometry), nuclear power station equipment - and achieving products at a highly qualitative level. Under the circumstances it was only natural for our products to ensure themselves a broad access to the world's markets many years ago. Presently our highly competitive products, ranked among those put out by world-renowned firms, are followed with keen interest on all meridians.



NEW PRODUCTS CARRYING THE VULCAN EMBLEM WIDELY SOLICITED BY OUR NUMEROUS BENEFICIARIES

ENERGY BOILERS displaying new constructive solutions with the following functional parameters (coaster coal with a lower heating value of 1,350-1,800 Kcal/kg is used for those burning solid fuel):

● 120 t/h steam, 100 kg/cm, 540°C - fuel: brown coal lignite ● 120 t/h steam, 100 kg/cm, 540°C - fuel: crude oil, gas ● 420 t/h steam, 110 kg/cm, 530°C - fuel: brown coal ● 525 t/h steam, 100 kg/cm, 540°C - fuel: brown coal ● 525 t/h steam, 100 kg/cm, 540°C - fuel: crude oil

TRANSLATION PUMPING UNIT (without beam and head; original patent) with the following characteristics: ● reduced floor space on which it is laid ● reduced size (two-point setting) ● energy consumption curtailed by some 35 per cent ● simple construction with increased reliability

8-12 M LONG STROKING PUMPING UNIT, driven by flexible elements (original patent), designed for the extraction of oil from deep and very deep wells. Basic characteristics: ● the construction has an original one-day operation principle (it does not require change-over switch) ● a simple construction with increased reliability

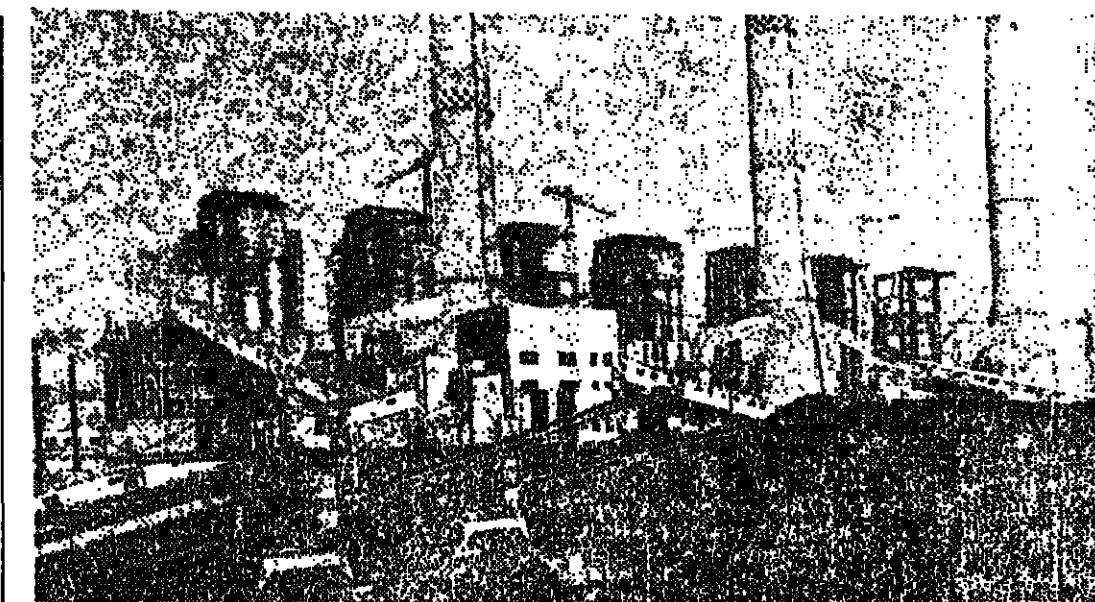
FROM THE CURRENT PRODUCTION OF VULCAN PLANT MASSIVELY DELIVERED TO VARIOUS MARKETS

BOILERS

● Industrial steam boilers with 0.5-1,035 t/h for pressures of 15-40 atm ● 120-1,035 t/h, 100-195 atm energy steam boilers ● 10-100 Gcal/h hot water boilers (for liquid, solid or gaseous fuel)

AUXILIARY EQUIPMENT AND TOOLS FOR STATIONS AFFERENT TO ALL BOILERS MANUFACTURED BY VULCAN

● boiler crushers and vibration mills of various capacities for coal grinding ● wa-



ter-water medium and high pressure heat exchanger ● steam-water horizontal and vertical heat exchanger, 1-4 passages ● ion and na-cation filters with supporting layer or nozzles ● vertical and horizontal clearing filters with supporting layer ● mist bed, intercooler regenerators, rubber-coated filters with nozzles ● cylindrical or parallelepipedal air tanks, nom. press. 8, 10 and 16 atm ● rubber-coated CO₂ degasifier ● ion or mist bed ● rubber-coated vertical and horizontal tanks ● horizontal and vertical tank platform ladders and stainless steel preheaters ● horizontal and vertical, base heating boilers with 2-4 passages

NUCLEAR STATION EQUIPMENT

OUT PUMPING UNITS offered in 82 variants (the construction is of the walking-beam type or with front geometry)

REMEMBER:

We grant technical assistance and "turnkey" deliveries through the highly trained specialists of the Enterprise for Mounting and Repairing Thermal Boilers, part of the CIUE contract - to which VULCAN Enterprise also belongs.

Having a high technical-scientific-productive potential, VULCAN Enterprise is ready to contact other specialized enterprises with a view to implementing mutually advantageous cooperations, based on its own or the partners' documentation, the respective designs and documents being included in international standards. VULCAN guarantees the carrying out of cooperations, of assimilations in the best conditions. These affirmations are eloquently supported by the excellent cooperation relations our enterprise has with firms from Czechoslovakia, West

Germany, the German Democratic Republic, Egypt, the Philippines, India, Pakistan, Turkey, the USSR. In this context the assimilation is inscribed of the execution of steam boilers with a flow of 1,035 tons steam hour after HANCOCK-WILKIN (Hence West Germany).

The exceptional quality of products bearing the VULCAN trade mark made them be homologated by specialized institutes of international renown. Thus, for example, AMERICAN PETROLEUM INSTITUTE in the USA granted Vulcan Enterprise, through documentary certification, the right to deliver the pumping units it produces with the Institute's initials - API - engraved on them. The same Institute placed our enterprise in the world hierarchy of specialized producers, among the main oil equipment suppliers in the world. Also, the unanimous appreciations met by our products during their participation in numerous world fairs and exhibitions eloquently confirm once more the great prestige enjoyed by the VULCAN mark in the world.



You can contact us with a view to obtaining additional information and concluding firm orders at the following address:

Vulcan

VULCAN ENTERPRISE

ROMANIA • BUCHAREST • 88, SEBASTIAN STREET • PHONE 310130 (149 - PROTOCOL) • TELEX 11127

THE INDUSTRIAL CENTRAL FOR POWER EQUIPMENT - CIUE

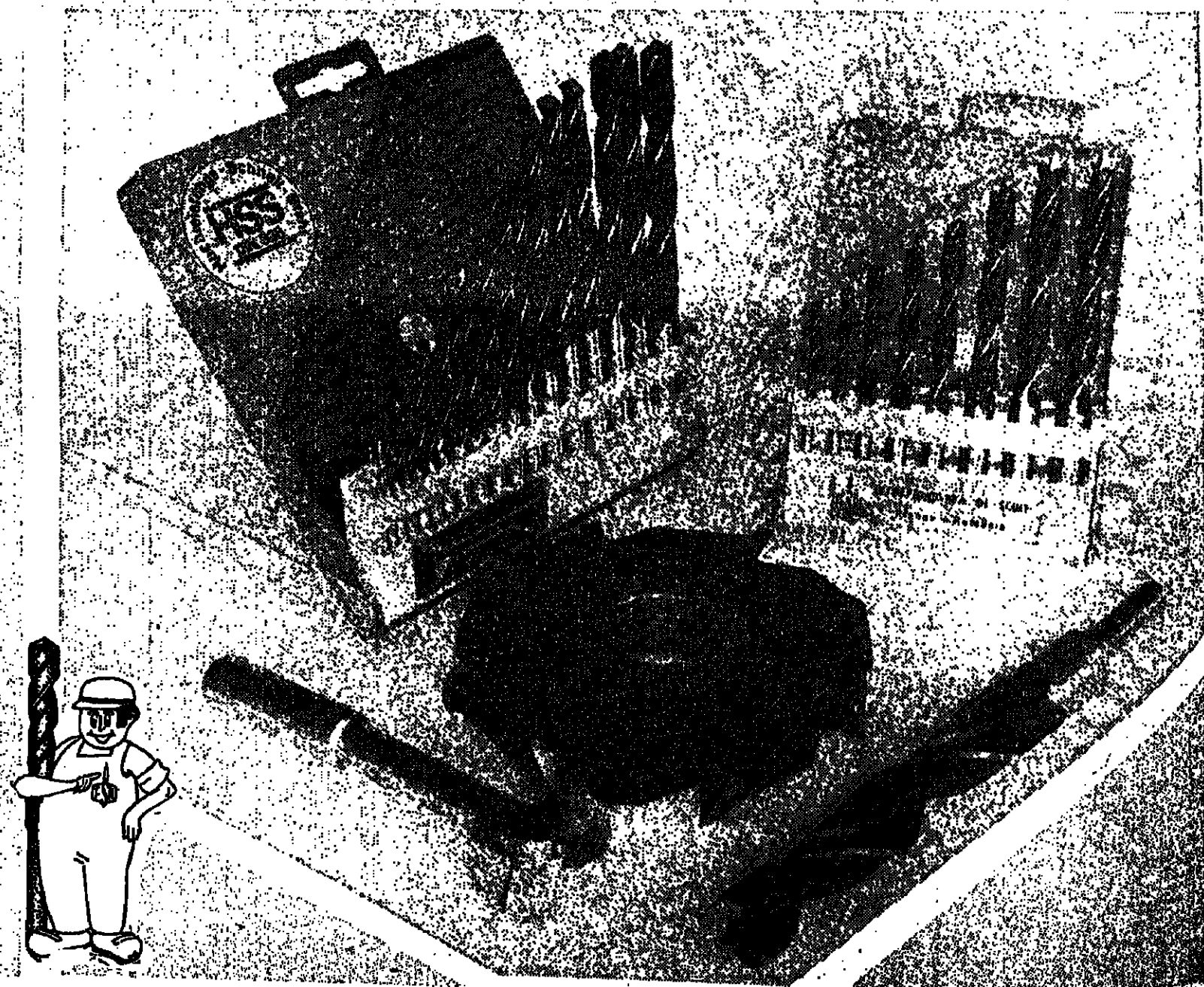
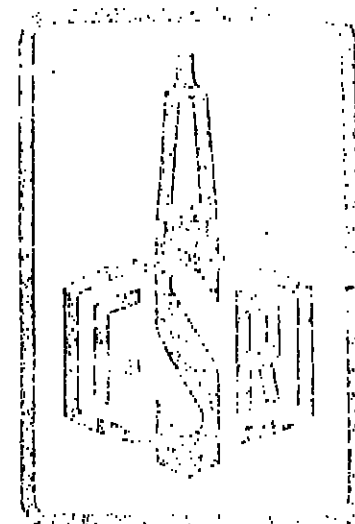
ROMANIA • BUCHAREST • 104, BERCENI ROAD • PHONE 83 5940 • TELEX 11802, 10-243

OUR TRADITION...

AND 50 YEARS OF EXPERIENCE IN THE FIELD OF CUTTERS
ARE ENOUGH ARGUMENTS FOR YOU TO CHOOSE THE PRODUCTS
OF THE RIȘNOV TOOLS ENTERPRISE

● THE ENTERPRISE MANUFACTURES ANY TYPE OF SPECIAL
CUTTERS UPON REQUEST, ACCORDING TO THE DOCUMENTATION
OF THE CLIENT OR OF THE FIRM

● OUR ENTERPRISE HAS A HIGHLY TRAINED COLLECTIVITY
OF WORKERS, TECHNICIANS AND ENGINEERS, AS WELL AS DESIGN
TEAMS ABLE TO MEET ANY ORDER OF TOOLS



THE ENTERPRISE CURRENTLY MANUFACTURES A WIDE RANGE OF
TOOLS AND TOOL SETS INDISPENSABLE TO A MODERN INDUSTRY
AND TO ANY HOUSEHOLD :

● Bore ● Reamers ● Shank and hole boring cutters ● Carbide plate
cutters ● Gravers ● Broaches ● Mining and boring tools ● Titanized tools
(bore, cutter and reamers) ● Tube bits ● Cement and stone drill sets,
Ø 4-10 mm and Ø 5-7 mm ● Metal drill sets, Ø 1.5-6.5 mm ● Metal
drill sets, Ø 1-10 mm ● Metal drill sets, Ø 1-13 mm ● Tap drill sets,
Ø 4-12 mm ● Wood drill sets, Ø 3-10 mm ; Ø 4-12 mm ● Dacia 1300
engine valve seat correction sets ● Tap correction tool sets ● Sets with
broken screw extractors ● Pipe cutting dies, K G 1/4" - KG 2"

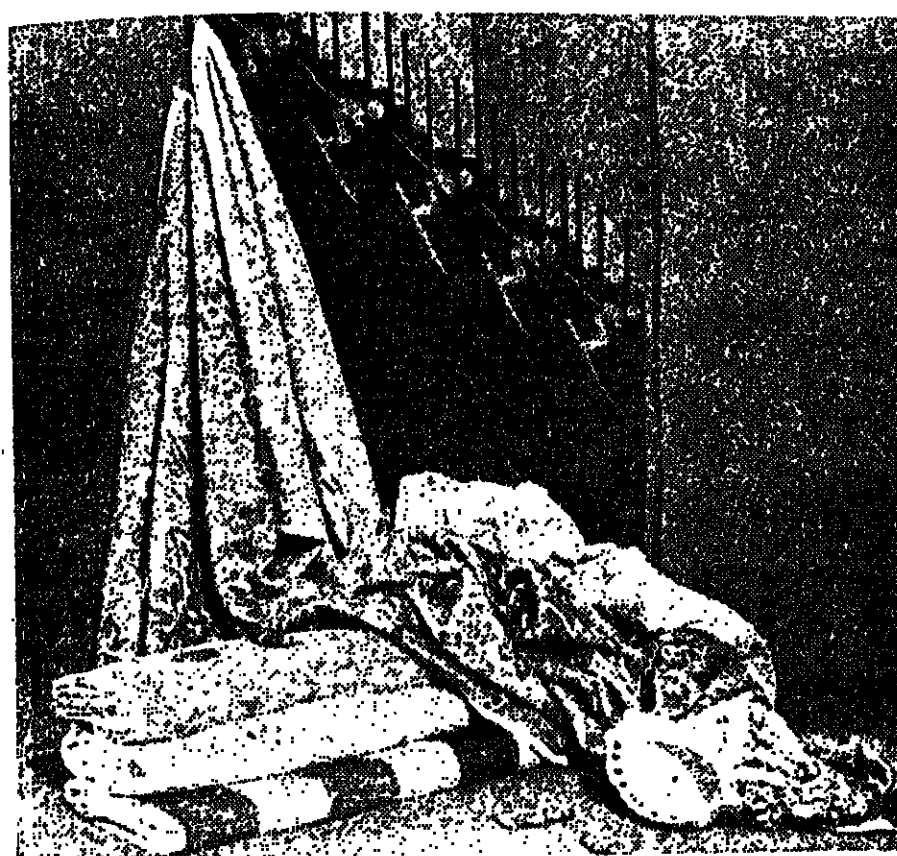
WE ARE WAITING FOR YOUR ORDERS AT THE FOLLOWING
ADDRESSES :

THE RIȘNOV TOOLS ENTERPRISE

1, Cîmpului St. ● Tel : 92/23 06 81-82, 921/1 62 02-03 ● Telex 6127
ISRV ● Brașov county ● Romania

MAȘINEXPORTIMPORT

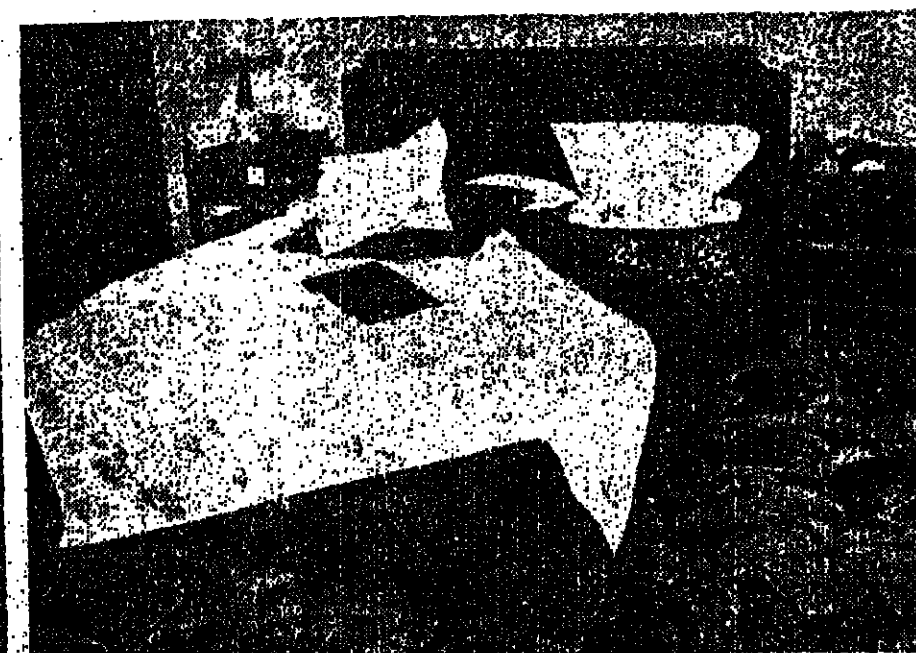
Bucharest ● Romania ● 32 Republici Blvd. ● Tel : 13 75 96 ● Telex
11206, 11216



THE CENTRAL OF THE COTTON INDUSTRY

EXPORTS:

- COTTON OR COTTON-TYPE FABRICS IN
A WIDE RANGE OF DESIGNS AND
COLOURS FOR GARMENTS (DRESSES,
BLOUSES) AND HOUSE LINEN
- FABRICS (COTTON 50 PER CENT AND
POLYESTER 50 PER CENT, OR COTTON
33 PER CENT AND POLYESTER 67 PER
CENT)
- FABRICS MADE OF POLYESTER-VISCOSE
MIXTURES IN VARIOUS PROPORTIONS
- NON-CREASING 100 PER CENT VISCOSE
FABRICS WITH SPECIAL FINISHES LIKE
SILK- OR WOOL-TYPE



FOR ADDITIONAL INFORMATION, PLEASE CONTACT
THE CENTRAL OF THE COTTON INDUSTRY

BUCHAREST ● ROMANIA ● 2 MORARILOR ROAD ● PHONE 27 60 80 ● TELEX 112 65